IN THE CLAIMS

Please cancel claims 72-73 and 77-78.

1. (Previously Presented) A method for controlling laser power in a communication system, the method comprising:

maintaining power of a first beam transmitted by a first node to a second node at a first level when the power of a second beam transmitted by the second node and received by the first node is above a minimum value;

reducing the power of the first beam to a second level when power from the second beam falls below the minimum value;

pulsing the power of the first beam;

transmitting information during the pulsing of the first beam to reestablish communication with the second node; and

increasing the power of the first beam to the first level;

wherein the pulsing power of the first beam includes a first high power level during a first portion of the pulsing and a second high power level during a second portion of the pulsing.

2. (Original) The method of claim 1, further comprising;

reducing the power of the second beam to the second level when power of the first beam received at the second node is reduced below the minimum value to limit an object's radiation exposure to a safe level when the object blocks the second beam.

3. (Original) The method of claim 2, further comprising:

pulsing the power of the second beam to limit the radiation exposure of the blocking object to the safe level;

transmitting information during the pulsing of the second beam to reestablish communication with the first node; and

increasing the power of the second beam.

4. (Previously Presented) The method of claim 1, further comprising the first and second beams maintaining a safe exposure level to a blocking object.

5. (Previously Presented) The method of claim 1, wherein the first portion and the second portion have an equal duration.

6. (Previously Presented) The method of claim 1, wherein transmitting information during the pulsing of the first beam is performed during the first portion and the second portion.

7. (Original) The method of claim 1, wherein transmitting information includes orientation information.

8. (Original) The method of claim 1, wherein the transmitting information includes node identification.

9. (Original) The method of claim 1, wherein the transmitting information includes node position.

10. (Original) The method of claim 1, wherein the transmitting information includes acquisition information and other information.

11. (Original) The method of claim 10, wherein the acquisition information and the other information is transmitted during different pulses.

12. (Original) The method of claim 1, wherein the minimum value is selected based on a predetermined signal to noise ratio for the first beam at the second node.

13. (Original) The method of claim 1, wherein the minimum value is harmful to humans.

14. (Original) The method of claim 1, wherein reducing the power of the first beam satisfies a class 1 AEL level.

15. (Original) The method of claim 1, wherein pulsing the power of the first beam satisfies a class 1 AEL level.

16. (Original) The method of claim 1, wherein reducing the power of the first beam satisfies a class 1M AEL level.

17. (Original) The method of claim 1, wherein pulsing the power of the first beam satisfies a class 1M AEL level.

18. (Original) The method of claim 1, wherein pulsing the power of the first beam provides an adequate signal to noise ratio to communicate with the second node.

19. (Previously Presented) A system configured for controlling laser power in a communication system, the system comprising:

a first node having a first transceiver configured to transmit a first beam at a first power level and configured to receive a second beam;

a second node having a second transceiver configured to transmit the second beam at a second power level to the first transceiver and configured to receive the first beam transmitted by the first transceiver;

a first control module configured to change the first power level of the first beam based on the power level of the received second beam; and

a second control module configured to change the second power level of the second beam based on the power level of the received first beam;

wherein the first control module includes a processor configured to change the first power level to an acquisition and recovery mode.

20. (Original) The system of claim 19, wherein the first transceiver includes a receiver and a transmitter.

21. (Original) The system if claim 19, wherein the second transceiver includes a receiver and a transmitter.

22. (Original) The system of claim 19, further comprising communication electronics configured to couple the first control module to the first transceiver.

23. (Original) The system of claim 19, further comprising communication electronics configured to couple the second control module to the second transceiver.

24. (Original) The system of claim 20, wherein the receiver includes an optical detector configured to detect the second beam.

25. (Original) The system of claim 24, wherein the receiver includes a processing circuit element coupled to the receiver and configured to extract a data signal and a received signal strength indicator from the second beam.

26. (Original) The system of claim 20, wherein the transmitter includes a laser configured to emit the first beam and a power switch coupled to both the laser and the first control module to change the first beam power.

27. (Original) The system of claim 20, wherein the transmitter includes a laser configured to emit the first beam and a driver circuit coupled to both the laser and the first control module to change the first beam power.

28. (Previously Presented) The system of claim 19, wherein the processor is configured to change the first power level between multiple modes.

29. (Original) The system of claim 28, wherein the first control module is configured to change the duration of the power level within the multiple modes.

30. (Original) The system of claim 19, wherein the processor changes the first power level to a normal operation mode.

31. (Original) The system of claim 19, wherein the processor changes the first power level to a power reduction mode.

32. (Previously Presented) The system of claim 19, wherein the first and second beams maintain a safe exposure level to a blocking object.

33. (Original) The system of claim 28, wherein the multiple modes includes radiation levels harmful to humans.

34. (Previously Presented) The system of claim 28, wherein the processor comprises a programmable logic device, a microprocessor, or a microcontroller.

35-36. (Canceled).

37. (Original) The system of claim 28, wherein the processor receives multiple signals from the transceiver.

38. (Original) The system of claim 37, wherein the multiple signals include a data signal and a received signal strength indicator signal.

39. (Original) The system of claim 38, wherein the received signal strength indicator indicates to the processor that the second beam of radiation is blocked.

40. (Original) The system of claim 38, wherein the received signal strength indicator indicates to the processor that the first beam of radiation is blocked.

41. (Previously Presented) An optical communication system comprising:

a first transceiver configured for communicating data from a first node to a second node;

a second transceiver configured for communicating data from the second node to the first node;

a first processor in electrical communication with the first transceiver and controlling the power level and duration of the first beam based on the power level of the second beam received by the first transceiver; and

a second processor in electrical communication with the second transceiver and controlling the power level and duration of the second beam based on the power level of the first beam received by the second transceiver;

wherein the power level includes multiple modes and includes an acquisition and recovery mode.

42. (Previously Presented) The optical communication system of claim 41, wherein the first control module varies the power level of the first beam when an object blocks the first beam to maintain a safe exposure level to the object.

43. (Previously Presented) The optical communication system of claim 41, wherein the power level includes a normal operation mode.

44. (Previously Presented) The optical communication system of claim 41, wherein the power level includes a power reduction mode.

45. (Canceled).

46. (Previously Presented) The optical communication system of claim 41, wherein at least one of the multiple modes includes radiation levels harmful to humans.

47. (Original) The optical communication system of claim 41, wherein the first and second transceivers each include an optical detector and a radiation emitter.

48. (Previously Presented) The optical communication system of claim 41, wherein the first and second processors comprise programmable logic devices, microprocessors, or microcontrollers.

49-50. (Canceled).

51. (Original) The optical communication system of claim 41, wherein the first processor receives multiple signals from the first transceiver and the second processor receives multiple signals from the second transceiver.

52. (Original) The optical communication system of claim 51, wherein the multiple signals include a high-speed data signal and a received signal strength indicator signal.

53. (Original) The optical communication system of claim 52, wherein the received signal strength indicator indicates to the first processor that the first beam of radiation is blocked.

54. (Original) The optical communication system of claim 52, wherein the received signal strength indicator indicates to the first processor that the second beam of radiation is blocked.

55. (Previously Presented) A method for use in a system having a plurality of communication nodes, nodes having at least one optical transceiver configured to transmit and receive communication beams, the method comprising:

transmitting a first communication beam from a first transceiver to a second transceiver at a first power level;

transmitting a second communication beam from a second transceiver to the first transceiver;

detecting at the first transceiver an object blocking the first communication beam; and

reducing the power level of the first communication beam in response to detecting the object blocking the first communication beam; and

pulsing the power of the first communication beam, wherein the pulsing power of the first communication beam includes a first high power level during a first portion of the pulsing and a second high power level during a second portion of the pulsing.

56. (Original) The method of claim 55, wherein detecting at the first transceiver is based on a power level change of the second communication beam.

57. (Original) The method of claim 55, wherein detecting at the first transceiver is based on the duration of the interruption of the second communication beam.

58. (Original) The method of claim 55, wherein detecting at the first transceiver is based on an error rate associated with data transmitted by the second communication beam.

59. (Previously Presented) The method of claim 55, further comprising:

detecting at the second transceiver the object blocking the first communication beam; and

reducing the power level of the second communication beam in response to detecting the power level change in the first communication beam.

60. (Previously Presented) The method of claim 55, further comprising:

transmitting information during the pulsing of the first communication beam to reestablish communication with the second optical transceiver; and

increasing the power level of the first communication beam.

61. (Canceled).

62. (Original) The method of claim 60, wherein the transmitting information includes acquisition information.

63. (Original) The method of claim 56, wherein the power level change is measured based on a predetermined signal to noise ratio.

64. (Original) The method of claim 55, wherein reducing the power of the first communication beam satisfies a class 1 AEL level.

65. (Original) The method of claim 55, wherein reducing the power level of the first communication beam satisfies a class 1M AEL level.

66. (Original) The method of claim 60, wherein pulsing the power of the first communication beam satisfies a class 1 AEL level.

67. (Original) The method of claim 60, wherein pulsing the power of the first communication beam provides an adequate signal to noise ratio to communicate with the second transceiver.

68. (Previously Presented) A system for use in a system having a plurality of communication nodes, the nodes having at least one optical transceiver configured to transmit and receive communication beams, the system comprising:

means for transmitting a first communication beam from a first transceiver to a second transceiver at a first power level;

means for transmitting a second communication beam from a second transceiver to the first transceiver;

means for detecting at the first transceiver an object blocking the second communication beam; and

means for reducing the power level of the first communication beam in response to detecting the object blocking the second communication beam; and

means for changing the first power level to an acquisition and recovery mode.

69. (Original) The system of claim 68, further comprising:

means for detecting the power level reduction in the first communication beam at the second transceiver;

means for reducing the power level of the second communication beam in response to detecting the power level reduction in the first communication beam.

70. (Original) The system of claim 69, further comprising:

means for pulsing the power of the first communication beam to limit the radiation exposure for a blocking object to a safe level;

means for transmitting information during the pulsing of the first communication beam to reestablish communication with the second optical transceiver; and

means for increasing the power level of the first communication beam.

71. (Previously Presented) A method for controlling laser power in a communication system, the method comprising:

maintaining power of a first beam transmitted by a first node to the second node at a first level when the power of a second beam transmitted by a second node and received by the first node is above a minimum value;

maintaining power of the second beam at the first level when the power of the first beam received by the second node is above the minimum value;

reducing the power of the second beam to a second level when the received power from the first beam falls below the minimum value;

reducing the power of the first beam to the second level when power from the second beam falls below the minimum value to limit an object's radiation exposure to a safe level when the object blocks the first beam;

changing the first power level to an acquisition and recovery mode;

pulsing the power of the first beam to limit the radiation exposure of the blocking object to the safe level;

transmitting information during the pulsing of the first beam to reestablish communication with the second node; and

increasing the power of the first beam to the first level.

72. (Previously Presented) A method for controlling laser power in a communication system, the method comprising:

maintaining power of a first beam transmitted by a first node to a second node at a first level when the power of a second beam transmitted by the second node and received by the first node is above a minimum value;

reducing the power of the first beam to a second level when power from the second beam falls below the minimum value;

pulsing the power of the first beam;

transmitting information during the pulsing of the first beam to reestablish communication with the second node; and

increasing the power of the first beam to the first level;

wherein the information which is transmitted includes orientation information.

73-74. (Canceled).

75. (Previously Presented) A system configured for controlling laser power in a communication system, the system comprising:

a first node having a first transceiver configured to transmit a first beam at a first power level and configured to receive a second beam;

a second node having a second transceiver configured to transmit the second beam at a second power level to the first transceiver and configured to receive the first beam transmitted by the first transceiver;

a first control module configured to change the first power level of the first beam based on the power level of the received second beam; and

a second control module configured to change the second power level of the second beam based on the power level of the received first beam;

wherein the first transceiver includes a receiver and a transmitter, wherein the transmitter includes a laser configured to emit the first beam and a power switch coupled to both the laser and the first control module to change the first beam power.

76. (Previously Presented) A system configured for controlling laser power in a communication system, the system comprising:

a first node having a first transceiver configured to transmit a first beam at a first power level and configured to receive a second beam;

a second node having a second transceiver configured to transmit the second beam at a second power level to the first transceiver and configured to receive the first beam transmitted by the first transceiver;

a first control module configured to change the first power level of the first beam based on the power level of the received second beam; and

a second control module configured to change the second power level of the second beam based on the power level of the received first beam;

wherein the first transceiver includes a receiver and a transmitter, wherein the transmitter includes a laser configured to emit the first beam and a driver circuit coupled to both the laser and the first control module to change the first beam power.

77-78. (Canceled).